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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/878,586  | 06/11/2001  | Donald L. Schilling  | 1-2-53.3US          | 4509             |
| 24374   | 7590        | 04/15/2005           | EXAMINER            |                  |
| VOLPE AND KOENIG, P.C.<br>DEPT. ICC<br>UNITED PLAZA, SUITE 1600<br>30 SOUTH 17TH STREET<br>PHILADELPHIA, PA 19103 |             |                      | TON, DANG T         |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2666                |                  |

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                      |  |
|------------------------------|------------------------|----------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>  |  |
|                              | 09/878,586             | SCHILLING, DONALD L. |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>      |  |
|                              | DANG T TON             | 2666                 |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 June 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/27/2001</u> . | 6) <input type="checkbox"/> Other: _____  |

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claims 1-6 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1,4 and 17 of U.S. Patent No. 6,389,002. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following :

For claims 1-6, the claims 1,4,and 17 of the patent number 6,389,002 disclose

a method of non-interferingly overlaying spread-spectrum code division multiple access (CDMA) signals within a wide bandwidth over an existing cellular communication system, the existing system having a plurality of base stations, each the base station having an operating area divided into a plurality of sectors, each the base station's sector assigned predetermined frequency bandwidths within the wide CDMA bandwidth for use in communicating data between that sector's base station and non-CDMA cellular users within that sector, the method comprising:

generating a spread-spectrum data signal having a pseudo random chip code sequence for a selected spread-spectrum unit within one of the existing base station's operating area for transmission over the wide CDMA bandwidth;

determining the frequency bandwidths assigned to the sector of the one base station where the selected unit is located and the frequency bandwidths assigned to the sectors of others of the existing base stations contiguous with the selected unit's sector;

notch filtering the spread-spectrum data signal at the determined frequency bandwidths;

transmitting the notch filtered spread-spectrum data signal to the selected unit over the wide bandwidth; and

at the selected unit, receiving the notch filtered spread-spectrum data signal ;

wherein the non-CDMA cellular users are time division multiple access users; and

wherein the notch filtering means is a comb filter.

Note: see claims 1,4, and 17 of the patent.

For claims 1-6, the applicant's claims merely broaden the scope of the patent claims 1,4, and 17 by eliminating the terms "having a pseudo random chip code sequence for" ; "determining the frequency bandwidths assigned to the sector of the one base station where the selected unit is located and the frequency bandwidths assigned to the sectors of others of the existing base stations contiguous with the selected unit's sector" ; "the selected unit over the wide bandwidth; and

" at the selected unit, receiving the notch filtered spread-spectrum data signal" from the claim 1 of the patent . It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re karlson, 136 USPQ 184 (CCPA). Also note Ex Parte Raine, 168 USPQ 375 (bd. App. 1969); omission of a reference element whose function is not need would be obvious to one skilled in the art.

For claims 1-6, the claims 1,4,and 17 of the patent number 6,389,002 disclose all the subject matter of the claimed invention with the exception of using narrow band users in a communications network (the claims 1,4,and 17 of the patent number 6,389,002 does teach non-CDMA users ). However, the narrow band users are well-known in the art. Thus, it would have

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been obvious to the person of ordinary skill in the art at the time of the invention to replace the non CDMA users as taught by the claims 1,4,and 17 of the patent number 6,389,002 with the narrow band users for the purpose of increasing capacity for communications in a mobile radio cellular systems.

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schilling ( 6,011,789 ; 5,703,874; and 5,351,269) is cited to show systems which are considered pertinent to the claimed invention.


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANG T TON whose telephone number is 571-272-3171. The examiner can normally be reached on MON-WED, 5:30 AM-6:00 PM .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Ton

  
[REDACTED]  
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